



CLAIMS

1. A driving circuit characterized by the following facts: the driving circuit has a high input impedance and a low output impedance; the driving circuit is equipped with an amplification part between the input terminal and output terminal; the driving circuit is operated in such a way that the voltage of the output signal obtained at said output terminal becomes consistent with the voltage of the input signal input to said input terminal;

from the point in time when an input signal with a prescribed voltage is input to said input terminal to the point in time when the voltage of the output signal obtained at said output terminal reaches a level close to said prescribed voltage, said input and output terminals are electrically shorted, and said amplification part is turned off.

2. A driving circuit having the following parts:

a differential input part which can differentially input a first and a second signal;

an output part which is connected to an electric load, amplifies the output signal of said differential input part, and supplies the amplified signal to said load;

a feedback circuit which feeds back the output signal obtained from said output part as the second signal to said differential input part;

a bypass control means which can send an input signal with a prescribed voltage to said load through a circuit bypassed with respect to said differential input part and output part from the point in time when said input signal is input as the first signal to said differential input part to the point in time when the voltage of said output part reaches a level close to said prescribed voltage;

and an operation control means which turns off said differential input part and/or output part at the time when the voltage of the output signal of said output part reaches a level close to said prescribed voltage.

3. The driving circuit described in Claim 2 characterized by the fact that the aforementioned bypass circuit is comprised of the aforementioned feedback circuit.

4. The driving circuit described in Claim 3 characterized by the fact that the aforementioned bypass control means has

a switch which is connected between the first and second input terminals used for inputting, respectively, the first and second signals of the aforementioned differential input part, and

a switch control means which can keep said switch in an open state before the voltage of the output signal of the aforementioned output part reaches a level close to the aforementioned prescribed voltage and can close said switch after the voltage of the output signal of said output part reaches a level close to said prescribed voltage.

5. The driving circuit described in any of Claims 2-4 characterized by the fact that the aforementioned differential input part and/or output part includes a constant current source circuit, and

the aforementioned operation control means includes a constant current source control means which can keep said constant current source circuit in an on state before the voltage of the output signal of said output part reaches a level close to the aforementioned prescribed voltage and can turn off said constant current source circuit after the voltage of the output signal of said output part reaches a level close to said prescribed voltage.